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MOTOROLA INC
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EXAMINER

DESIR, PIERRE LOUIS

ART UNIT	PAPER NUMBER
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2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/749,021

Applicant(s)

BI ET AL

Examiner

Pierre-Louis Desir

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,13-23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,13-23 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 10, 13-14, 17-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Khayrallah, Pub. No. US 20030200499.

Regarding claim 13, Khayrallah discloses a method in wireless communications network, the method comprising: transmitting content and reliability information on a first channel (i.e., a temporal data stream 30 is divided into multiple segments 31, 32, 33, each comprising some number $K_{sub.1}$, $K_{sub.2}$, $K_{sub.3}$ of information symbols, respectively (where $K_{sub.1}$, $K_{sub.2}$, $K_{sub.3}$ may or may not be equal). Each segment 31, 32, 33 is then encoded at blocks 41, 42, 43, respectively, utilizing a FEC code. The FEC code parameters at blocks 41, 42, 43 may be the same, but need not be. The encoding processes 41, 42, 43 each generate a corresponding set of transmission symbols 51, 52, 53, each of length $N_{sub.1}$, $N_{sub.2}$, $N_{sub.3}$, respectively, where $N_{sub.1} \geq K_{sub.1}$, $N_{sub.2} \geq K_{sub.2}$, and $N_{sub.3} \geq K_{sub.3}$. These sets of transmission

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symbols are concurrently transmitted by the RBS 16 in separate communication channels 61, 62, 63, and are subsequently received by, in general, a plurality of mobile terminals 18) (see figs. 3-4, abstract, and paragraphs 28 and 33) transmitting additional reliability information for the content on a second channel, the reliability and additional reliability information for decoding the content (see figs. 3-4, abstract, and paragraphs 28 and 33).

Regarding claim 10, Khayrallah discloses a method (see claim 13 rejection) comprising encrypting before transmitting (i.e., each segment 31, 32, 33 is then encoded at blocks 41, 42, 43, respectively, utilizing a FEC code) (see figs. 3-4, paragraph 28).

Regarding claim 14, Khayrallah discloses a method (see claim 13 rejection) comprising transmitting the content, the reliability information and the additional reliability information with sufficient temporally proximity to enable decoding of the content, by a recipient, using the reliability and additional reliability information (i.e., concurrent transmission) (see figs. 3-4, paragraphs 28 and 33).

Regarding claim 17, Khayrallah discloses a method (see claim 13 rejection), comprising transmitting the content and reliability information on a shared channel (see figs. 3-4, abstract, paragraphs 28 and 33); transmitting additional reliability information for the content on another shared channel (see figs. 3-4, abstract, paragraphs 28 and 33).

Regarding claim 18, Khayrallah discloses a method (see claim 13 rejection) transmitting the content and reliability information using a first transmission parameter (i.e., separate communication channels) (see figs. 3-4, abstract, and paragraph 28 and 33); transmitting the additional reliability information using a second transmission parameter different than the first

transmission parameter (i.e., separate communication channels) (see figs. 3-4, abstract, and paragraph 28 and 33).

Regarding claim 19, Khayrallah discloses a method (see claim 13 rejection) transmitting the content and reliability information on a first channel substantially simultaneously with transmitting the additional reliability information for the content on the second channel (i.e., concurrent transmission) (see figs. 3-4, abstract, and paragraphs 28 and 33).

Regarding claim 20, Khayrallah discloses a method in wireless communications device, the method comprising: receiving a message identifying a channel on which content will be transmitted (i.e., the parameters of the selected traffic channel are sent to the mobile terminal 18 in a channel assignment message that is transmitted on the calling channel or on a temporary channel, which can both be referred to as a "call set-up channel." The mobile terminal 18 then leaves the call set-up channel and commences transmitting and receiving on the assigned traffic channel) (see paragraph 19); receiving first layer content information on a first channel (see figs. 3-4, abstract, paragraphs 28 and 33); receiving second layer content information on a second channel (see figs. 3-4, abstract, paragraph 28 and 33), at least one of the first and second channels identified in the message (see figs. 3-4, paragraphs 19, 28, and 33), the first and second layer content information is encrypted (i.e., Each segment 31, 32, 33 is then encoded at blocks 41, 42, 43, respectively, utilizing a FEC code) (see figs. 3-4, paragraphs 28-33), and decrypting the second layer content information with a second key that is different than the first key (i.e., the mobile terminal decodes the received information---It should be noted that Khayrallah discloses that the FEC code parameters at blocks 41, 42, 43 may be the same, **but need not be**. Thus the

information is encoded using different code parameters) (see figs. 3-4, paragraphs 28-29, and 33-34).

Regarding claim 21, Khayrallab discloses a method (see claim 20 rejection) comprising combining the first and second layer content at the wireless subscriber device (see figs. 3-4, paragraphs 28-29, and 33).

Regarding claim 22, Khayrallab discloses a method (see claim 20 rejection) wherein the wireless communications device is a broadcast/multicast subscriber device (see fig. 2, paragraphs 10 and 12), receiving first layer content information includes receiving first layer broadcast/multicast content information (see fig. 3-4, abstract, paragraphs 28 and 33); receiving second layer content information includes receiving second layer broadcast/multicast content information (see fig. 3-4, abstract, paragraphs 28 and 33).

Regarding claim 23, Khayrallab discloses a method (see claim 20 rejection) receiving first layer content information on a first channel includes receiving the first layer content information on a first broadcast channel (see figs. 3-4, abstract, paragraph 28 and 33).

Regarding claim 25, Khayrallab discloses a method (see claim 20 rejection) wherein at least one of the first and second layer content information is encrypted (i.e., Each segment 31, 32, 33 is then encoded at blocks 41, 42, 43, respectively, utilizing a FEC code) (see figs. 3-4, paragraphs 28 and 33), receiving at least one decryption key for the at least one decrypted first and second layer content information, decrypting the at least one decrypted first and second layer content information with the decryption key (i.e., the mobile terminal decodes the received information---It should be noted that Khayrallab discloses that the FEC code parameters at

blocks 41, 42, 43 may be the same, **but need not be**. Thus the information is encoded using different code parameters) (see figs. 3-4, paragraphs 28-29, and 33-34).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khayrallab in view of Ranta-Aho et al. (Ranta-Aho), Pub. No. US 20040081125.

Khayrallab discloses a method as described above (see claims 13 and 14 rejections). Khayrallab also discloses a method comprising transmitting content and information on a shared broadcast channel wherein content information and reliability information are transmitted at substantially the same time (refer to claims 13 and 14 rejections) (see paragraphs 28-33). The combination further discloses transmitting additional broadcast/multicast service content information (see figs. 3-4, paragraphs 28 and 33).

Although Khayrallab discloses a method as described above, Khayrallab does not specifically disclose a method comprising transmitting information on a dedicated channel.

However, Ranta-Aho discloses a method wherein multicast messages are sent in the downlink shared channels (page 1, paragraph 22, also refer to paragraphs 31 and 52), and MBMS content is sent on the dedicated channel (see page 3, paragraph 58, also refer to paragraphs 31 and 52), and wherein broadcast or simulcast content information may be received simultaneously (see paragraph 70).


Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described above with the teachings of Ranta-Aho to arrive at the claimed invention. A motivation for doing so would have been to ensure the proper transport of the content information.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is (571) 272-7799. The examiner can normally be reached on Monday-Friday 8:00AM- 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Pierre-Louis Desir
03/05/2007


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER